REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-31 are pending. Claims 1 and 13 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 13.

Claim Amendments

Independent claims 1 and 13 are amended for purposes of clarification. No new matter is added by way of these amendments, as support may be found at least in paragraph [0029] and [114], and the Abstract of the publication of the present application.

Rejection(s) under 35 U.S.C. 102

Claims 1-3, 8-10, 12, 13-15, 20-22, 24, 26, and 30-31 are rejected under 35 U.S.C. § 102(b) as being anticipated by "Data Communications, Computer Networks and Open Systems," 4th Edition, 1996, by Fred Halsall ("Halsall"). This rejection is respectfully traversed.

For anticipation under § 102, "[a] claim is anticipated only if *each and every element* as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (emphasis added). Further, "[t]he identical invention must be shown in as complete detail as is contained in the claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). Applicants assert that Halsall fails to disclose each and every element of the claims.

The claimed invention relates to the recovery of information transmitted for an application program running in a terminal device of an interactive digital TV system. *See* publication of present application, paragraph [0001]. Specifically, the amended independent claims recite, in part, (i) loading and storing the information in a cache memory provided in the terminal device, wherein the information is service information corresponding to the one or more applications; and (ii) searching for the information, according to at least one predefined selection criterion used to define a type of search performed, in at least one of the information carriers formed by the data stream, and the cache memory. Information refers to service information, examples of which are provided in paragraph [0172] of the present application. Service information corresponds to the *application programs* carried in the data stream. *See* publication of present application, Abstract. Applicants respectfully assert that Halsall fails to disclose the aforementioned limitations recited in (i) and (ii) above.

Specifically, Halsall relates to transmission of frames of information between two terminals across a point-to-point data link. *See* Halsall, Abstract. Halsall discloses a layered architecture "decoupling the combined application and the communication tasks to create two-well defined subtasks or layers with formal interface between them" (*see* Halsall, p.174, ll. 14-16). "The service provided by communication layer" to the application layer "is expressed in the form of a service primitive" (*see* Halsall, p. 175 ll. 12-14), and service primitive between layers are exchanged through a message queue.

Halsall describes the communication layer and service primitive offered to the application layer, while the present application focuses on the application layer. With respect to the claims, Halsall fails to disclose storing *application information* in the terminal to facilitate a search for information either in the incoming data stream or the terminal device memory which

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is *cache memory*. Specifically, Halsall discloses buffering information for communication services in a *queue*. Information for communication services is not equivalent to the application information recited in the claimed invention. Specifically, the information for communication services disclosed in Halsall does not correspond to application programs, as required by the service information recited in the claimed invention. Further, even assuming *arguendo* that the information of Halsall is equivalent to the service information of the claimed invention, cache memory is distinct from buffer memory. A cache memory, as described in the instant patent application, contains stored information and is automatically updated with the information of the incoming data stream. For example, in one or more embodiments, the present application describes "[T]he automatic loading of the service information into the cache memory is triggered by a programmed timer, for example at night, or when a particular event occurs, such as the switching-on of the receiver/decoder" which provides "optimal accessibility to the information by the application programs." *See* publication of present application, paragraphs [0029] – [0030].

Further, Halsall does not disclose searching for the information requested by the application in a terminal device among the information transported in the data stream, according to a predefined selection criterion. On the contrary, Halsall discloses various error detection and error recovery schemes. In Halsall, information is not searched in the terminal (*i.e.,* secondary S), but rather, is requested from the distant terminal (*i.e.,* Primary P) through the data link according to the recovery scheme. Moreover, the selection criterion for stored information as required by the independent claims is distinct from the error detection criterion or any other error related criteria disclosed in Halsall. Specifically, the selection criterion of the claimed invention defines a type of search performed for the information requested, whereas the error detection criteria are not used define any type of search performed in Halsall.

In view of the above, it is clear that the Examiner's contentions fail to support an anticipation rejection of the amended independent claims. Accordingly, amended independent claims 1 and 13 are patentable over Halsall. Pending dependent claims are patentable for at least the same reasons. Further, with respect to independent claim 13, Applicant asserts that Halsall fails to disclose or render obvious "recovering the information from an information carrier." In fact, the only type of recovery that Halsall discloses is *error* recovery. This is clearly distinct from recovery of service information associated with television channels and interactive services for applications executing in a terminal device.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. 103

Claims 4-5 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halsall. Finally, claims 6-7, 11, 18-19, 23, 25, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halsall in view of US Publication No. 2003/0074670 ("Penk").

As described above, Halsall fails to disclose or render obvious the limitations of the amended independent claims. Further, Penk fails to disclose or otherwise provide that which Halsall lacks. Specifically, Penk relates to providing network information using MPEG tables. However, Penk fails to disclose or render obvious a request for information from an application running on a terminal device among information transmitted with data stream, and further fails to disclose or render obvious performing a search in a cache memory to find the requested information for an executing application. Penk also fails to disclose or render obvious using a selection criteria that defines a type of search performed to recovery the requested information.

In view of the above, it is clear that the amended independent claims are patentable over Halsall and Penk, whether considered separately or in combination. Dependent claims 4-5 and 16-17 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number [11345/122001]).

Dated: June 15, 2009   Respectfully submitted,

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